

that the object is aposematic, the effect being achieved by a rapid transformation and apparent increase of size.

In conclusion, it is a pleasant duty to offer to my teacher, Professor Howes, my best thanks for the loan of literature and many references; and to my colleagues, Messrs. E. J. Allen and W. Garstang, for much assistance in various ways. I hope to be able, before long, to give a more complete account of the coloration-elements and mechanism and of the palatability of the species at different stages of the life-history.

#### EXPLANATION OF PLATE XXVI.

The Dragonet, *Callionymus lyra*. Male in full breeding-colour, in attitude of courtship. Drawn from a specimen living in the Marine Biological Association's Aquarium, February 1898. Reduced two-sevenths.

2. On the Serricorn Coleoptera of St. Vincent, Grenada, and the Grenadines (*Malacodermata*, *Ptinidæ*, *Bostrychidæ*), with Descriptions of new Species. By HENRY S. GORHAM, F.Z.S.

[Received March 3, 1898.]

(Plate XXVII. figs. 1-5 & 7-10.)

Although a considerable number of Coleoptera of the remaining families of the Serricorn series are here dealt with, it will be admitted that they represent but a very small portion of what may be expected when the larger islands of the West Indies have been more thoroughly examined for these groups. Among the wood-boring Beetles it is especially probable that further research will bring to light many endemic forms, and the list of species in the Lycidæ and Lampyridæ from Cuba renders it highly improbable that the Telephoridæ and Melyridæ are so poorly represented as the present collections would seem to indicate.

The fauna is in general quite similar to that of Central America. In the two islands from which the majority of the species collected by Mr. H. H. Smith come, there is a small admixture of more special South-American genera (*Astylus*, *Anidrytus*), but this is quite parallel to what obtains in Panama and in Costa Rica.

#### LYCIDÆ.

##### CALOPTERON.

*Calopteron*, Guérin, Voyage Coquille, p. 72; Gorch. Biol. C.-Am., Col. iii. pt. 2, p. 8.

CALOPTERON SMITHI, sp. n. (Plate XXVII. fig. 2.)

*Nigrum, prothoracis lateribus elytrisque late aurantiacis, his macula magna dorsali communi marginem vix attingentem apiceque late nigris, antennis vix serratis.* Long. 6-10 millim. ♂ ♀.

*Hab.* ST. VINCENT (*H. H. Smith*).

This is a small parallel species of *Calopteron* belonging to Section A. iii. in 'Biologia C.-Am.,' with four raised lines on each elytron, and the thorax with a simple carina. The antennæ are nearly simple in both sexes. The bases of the femora and the coxæ are often a little yellow, but only so at the joint.

The colouring of this insect is almost exactly that of *Emplectus letus* Er., and is also very like that of *Calocladon ephippium* Gorh. It would also at first sight be apt to be confounded with the species which follows (*C. delicatum* Kirsch), but in addition to the form of the central black patch, there are minute differences in the sculpture. The costæ and cells are more distinctly raised in this insect; it is also wider behind, and hence less parallel. The females are, as usual, larger and wider than the males.

About twenty examples.

#### CALOPTERON DELICATUM.

*Calopteron delicatum*, Kirsch, Berl. Zeit. 1865, p. 61; Bourg. "Contr. à la faune ent. des États-Unis de Colombie," Ann. Soc. Ent. Fr. 1879, p. 37.

*Hab.* GRENADA: Balthazar, Mt. Maitland, Chantilly Estate (*H. H. Smith*).

Some examples of this little insect are very like *C. smithi*; the central black fascia, however, always reaches the margin; and the suture from the base to the fascia is black. The apical fifth is black; it is more parallel; the second and fourth costæ are distinct, but the first and third are very indistinct. The examples, nine in number, from Balthazar, all agree very closely, and are 7 to 10 millimetres long. One from Mount Maitland has the central patch detached from the base, and so far resembles *C. smithi*, but in other points agrees with *C. delicatum*, and, being from the same side of the Island of Grenada, I have no doubt pertains to this species.

#### CALOPTERON OBLITUM, sp. n.

*Sublineare, niger, prothorace elytrisque sordide flavis, triente apicali et sutura usque ad costam secundam plus minusve nigris, costis secundo et quarto alte carinatis. Long. 8-10 millim. ♂ ♀.*

*Mas, antennis acute serratis.*

*Hab.* GRENADA: Grand Étang, 1900 feet, St. Vincent, Kingstown, and windward side to 1500 feet (*H. H. Smith*).

This little species is of the size and form of *C. delicatum*, but it wants the central black fascia, and the thorax is entirely yellow. The pattern is one common to many Lycidæ. One-third of the apex of the elytra is black, and there is a more or less extended black smear down the suture, sometimes but rarely joined to the apical black. The scutellum is yellow, or at least with yellow scales. The antennæ are about as long as in *C. delicatum*, i. e. about as long as the elytra. The two raised costæ are very strongly elevated, while the intermediate ones and the areolets are very indistinct.

The following species from the West Indies, referred to *Calopteron*, are now placed in the genus *Thonalmus*:—

- C. amabile*, Jacq. Duv. Hist. Cuba, 1857, p. 82. Cuba.  
*C. aulicum*, Jacq. Duv. l. c. p. 77, t. 7. f. 18. Cuba.  
*C. bicolor*, Linn. Amœn. Ac. vi. 1763, p. 395. Haiti, Jamaica, Cuba.  
*C. distinguendum*, Jacq. Duv. l. c. p. 80. Cuba.  
*C. dominicanum*, Chev. Ann. Soc. Ent. Fr. 1869. San Domingo.  
*C. suave*, Jacq. Duv. l. c. p. 80. Cuba.

And the following are recorded from Cuba, but are unknown to me:—

- C. elegantulum*, Jacq. Duv. l. c. p. 78. Cuba.  
*C. albicolle*, Chev. Rev. Zool. 1858, p. 209. Cuba.  
*C. denominatum*, Chev. Ann. Soc. Ent. Fr. 1869. Cuba.  
*C. nigritarse*, Chev. l. c. 1869, *C. semiflavum*, Chev., and *C. pectinicornæ*, Chev. l. c. 1869.

*PLATEROS PALLIATUS*, sp. n.

*Plateroti forrerano* Gorb. *affinis et summa similitudine; niger, prothorace et elytris læte flavis, his macula magna subbasali, communi basin attingente (humeris et marginibus flavis), et quadrante apicali nigris. Long. 9–10 millim. ♀.*

*Hab.* ST. VINCENT (*H. H. Smith*).

Head, body with the legs, and antennæ entirely black. The thorax yellow, wider at the base than its length, the central channel deep, the disk irregular, with ridges running obliquely from the raised edges of the channel from the base and middle, the frontal carina not defined. The elytra have the shoulders rather widely yellow, and narrowly joined with a broad yellow posterior fascia, narrowed on its basal side towards the suture. The black subbasal patch is thus broadly cruciform, differing from that in *P. forreranus* (a Central-American species) in being joined to the base, and in being further extended down the suture. The scutellum is black. This insect very closely resembles *P. forreranus* Gorb. Biol. C.-Am., Col. vol. iii. part ii. p. 239, Suppl., but there are important differences which cannot be overlooked.

*PLATEROS FRATERNUS*, sp. n.

*Niger, prothorace nitido, scutello et elytris flavis, his basi triente et quadrante apicali nigro-fumosis. Long. 7.5–8 millim.*

*Hab.* ST. VINCENT (*H. H. Smith*).

The antennæ in this species are scarcely serrate; the thorax and scutellum yellow, and both shining, the former transversely square, with a rather prominent and elevated front margin. The channel and oblique ridges distinct but ill-defined. The elytra very evenly striated, and the punctures distinct. The basal black covers the whole base except the extreme reflexed margin, and its apical side is rounded, but not regularly, as the blackness extends

further along the interstices than on the costæ. Rather more than a third of the elytra in their middle is straw-yellow. The apical black is also rather irregular on its basal side. This insect mimics very closely the *Photinus* described hereafter as *P. notatus*, and is probably to be found in company with it.

Two examples.

#### ASPIDOSOMA.

*Aspidosoma*, Gemm. & Harold, Cat. Col. p. 1645; Gorh. Biol. C.-Am., Col. vol. iii. pt. 2, p. 58.

*Aspisoma*, Laporte de Castelnau, Ann. Soc. Ent. Fr. 1833, p. 145.

#### ASPIDOSOMA SUPERCILIOSUM, sp. n.

*Oblongo-ovale, piceum, subnitidum, prothorace flavo interdum macula discoidali, agre distincta, bisinuata, et duabus basalibus fuscis; elytris piceis, lateribus late, ad apicem angustiore et sutura tenuiter pallide flavis; scutello flavido. Long. 7-8 millim. ♂ ♀.*

*Hab.* ST. VINCENT. GRENADA: Mount Gay Estate on the leeward side, and Caliveny Estate on the windward side, Woburn on the south end. GRENADINES, UNION ISLAND (1 ex.) (*H. H. Smith*).

The body and head are black, with the exception of the fifth and sixth segments in the male and the middle of these segments in the female, which are white, and that the tips of the trochanters and base of the femora and the basal joint of antennæ are pale. The thorax is ochraceous; in some examples the subdiaphanous part above the eyes appears as a dark spot taking the form of a bisinuate line, and in some there are two very obscure spots on the middle of the base. The scutellum is yellow, the præscutellar part fuscous. The form of the thorax is broadly semi-elliptical, slightly ogival in the males, and the sides and front are rather coarsely punctured. The elytra are pitchy black, with the entire sides and suture yellow, thickly punctured, and with two obsolete costæ. This insect is allied to, and of the same size and form as, *A. lepidum* (Biol. C.-Am. l. c. p. 54). It differs in the wholly yellow sides and suture of the elytra, and in the thorax being much less conspicuously marked.

The males scarcely differ from the females, except in the size of the eyes and more eburated luminous segments of the abdomen.

A large number of specimens were captured.

#### ASPIDOSOMA IGNITUM.

*Aspidosoma ignitum*, Linn. Syst. Nat. i. p. 645; Fabr. Syst. Ent. p. 201; De Geer, Ins. iv. p. 49, t. 17. fig. 2; Gorh. Rev. of Lamp., Trans. Ent. Soc. 1880, p. 83; Biol. C.-Am., Col. iii. pt. 2, p. 55.

*Aspisoma polyzona*, Chev. Col. Mex. Cent. i. fasc. iii.

*Hab.* ST. VINCENT: Kingstown. GRENADA: Mount Gay and Woodford Estates on the leeward side, Balthazar on the wind-



ward side. GRENADINES: Union Island (1 ex.), Mustique Island (H. H. Smith).

I have already in the 'Trans. Ent. Soc.' and in the 'Biologia C.-Am.' pointed out the above synonymy, and the series of specimens sent by Mr. H. H. Smith go far to confirm the correctness of that view. The great majority of the examples have pitchy-black elytra with pale sides as far as their middle, the margins thence to the apex with the suture narrowly yellow. The wide pale side contains two fuscous spots, one just outside the callus, the other below the middle. The thoracic markings vary a good deal in degree: in the St.-Vincent examples they are two squarish hook-shaped marks just separated by the central channel, and an obscure spot near the hind angles. In *A. polyzona* the inner side of the hook extends up the middle to the front margin, and is more or less fused along the channel, and in this form there are three pale lines on the disk of the elytra, *i. e.* the costæ are pale. Specimens of this kind occurred at Balthazar. Intermediate forms were found at the same place and at Mount Gay. Hence whatever difficulties there may be in identifying the *Lampyrus ignita* of Linnæus, I think there is no doubt that the present insect is not distinct from our Central-American species, and that it represents those South-American species which I have referred to it. *A. ignitum* has been previously recorded from the Antilles.

#### PHOTINUS.

*Photinus*, Laporte de Castelnau, Ann. Soc. Ent. Fr. ii. p. 141 (1833); Gorb. Rev. Lamp., Trans. Ent. Soc. 1880, p. 22; Biol. C.-Am., Col. iii. pt. 2, p. 38.

PHOTINUS NOTATUS, sp. n.? (Plate XXVII. fig. 3.)

*Nigro-fuscus; pedibus (tarsis fuscis), prothorace (disco miniato) et elytrorum fascia lata postmediana flavis. Long. 8 millim.*

*Hab.* ST. VINCENT: leeward side (H. H. Smith).

Antennæ rather long, entirely fuscous. Legs pale, the tibiæ (a little infuscate towards the apices) and tarsi fuscous. Prothorax entirely yellow, but that, as is often the case, when fresh the disc and underparts are pink or rosy, very even and smooth, only a faint indication of central channel. The elytra have a yellow band of rather more than a third of the elytral length, and produced a little both ways on the margins and towards the apex on the suture. There are three examples of this species, which is allied to *P. blandus* Mots. I have an example which is labelled "*notatus*" Gory, purporting to come from Brazil, but of uncertain origin; and as I do not know a species of the name attached, I give a brief description of our West-Indian insect.

#### PHOTINUS MINUTUS.

*Pyropyga minuta*, Leconte, Syn. Lampyr. 1881, p. 32.

If I am correct in referring the numerous examples obtained to

this species, it has a more extended range than I should have expected. It occurs in Florida and some of the Southern States, but not, so far as I am aware, in South America. *Ph. parvulus* Gorh., Mexico and Guatemala, and *P. decipiens* Harris, New York, Texas, Arizona, and Florida, are very nearly allied species.

*Hab.* ST. VINCENT: windward and leeward side, Kingstown. GRENADA: windward side, Grand Étang, Chantilly and La Force Estates; and leeward side, Mount Gay, Vendôme, and St. George's Estates (*H. H. Smith*).

Occurs from sea-level up to 2000 ft. altitude.

The following species of Lampyridæ have been previously recorded from the West Indies:—

- Lucidota dimidiatipennis*, Jacq. Duv. Hist. Ile de Cuba, p. 84.  
*L. janthinipennis*, Jacq. Duv. l. c. p. 83. Cuba.  
*L. miniatocollis*, Chevr. Rev. Zool. 1858, p. 209. Cuba.  
*Alecton discoidalis*, Lap. de Cast. Hist. Nat. i. p. 266. Cuba.  
*Photinus blandus*, Mots.; Jacq. Duv. l. c. p. 87. Cuba.  
*P. interruptus*, Mots. (nec Erichs.), Etud. Ent. iii. [p. 24, and  
*elongatus*, Mots. l. c. p. 35. "Antilles."  
*P. limbipennis*, Jacq. Duv. l. c. p. 86. Cuba.  
*P. littoralis*, Mots. l. c. ii. 1853, p. 35. Martinique.  
*P. pallens*, Fabr. Ent. Syst. Supp. p. 124; Brown, Nat. Hist.  
 Jamaica, p. 431, t. 44. f. 9. Jamaica.  
*P. quadrimaculatus*, Lap. de Cast. l. c. p. 269. San Domingo.  
*P. rufus*, Oliv. Ent. ii. p. 28, t. 3. f. 30 (*Lucidota*).  
*P. vittatus*, Fabr. (nec Oliv.), *vitiosus*, Gemm. Guadeloupe,  
 San Domingo, Jamaica.  
*P. vittatus*, Oliv. Ent. ii. p. 28, t. 3. f. 20. San Domingo.  
*P. vittiger*, Gyll. Schön. Syn. Ins. iii. App. p. 21. Martinique,  
 Guadeloupe.  
*Cratomorphus dorsalis*, Gyll. l. c. p. 24. "Antilles," St. Bar-  
 thélemy.  
*Photuris brunnipennis*, Jacq. Duv. l. c. p. 89. Cuba.

#### TELEPHORIDÆ.

##### TYLOCERUS.

*Tylocerus*, Dalman, Anal. Ent. 1823, p. 57; Laporte de Castelnau, Hist. Nat. i. p. 276; Lacord. Gen. Col., Atl. t. 45. f. 1.

*Anisotelus*, Hope, in Royle's 'Himalaya.'

TYLOCERUS LINEATUS, sp. n. (Plate XXVII. fig. 1.)

*Nigro-fuscus, subopacus; capite prothoraceque aurantiacis, hoc transverso, illo pone oculos superne nigro, linea basali mediana flava; coxis et trochanteribus pallide flavis; elytris nigro-fuscis, sutura margine laterali et apicali, et costa humerali ante apicem concolore albidis, scutello flavo. Long. 7-9 millim. ♂ ♀.*

*Mas, antennis longioribus, articulo basali magno, inflato, segmento sexto ventrali fisso.*

*Femina plerumque minor, antennis brevioribus.*

*Hab.* ST. VINCENT: leeward side. GRENADA: Balthazar, Grand Étang and Mount Gay Estate (*H. H. Smith*).

Head orange-yellow, with the base behind the eyes fuscous, divided by a yellow but ill-defined line in the males; antennæ black, as long as the body in the male, about two-thirds as long in the female. Thorax transverse and rectangular, but the front angles broadly rounded, and the hind angles not prominent, orange-yellow, the margins reflexed. Scutellum, mesosternum, coxæ, and trochanters yellow, the posterior coxæ a little infuscate. Legs fuscous black. Elytra fuscous, not shining, the suture and margins narrowly pale, as is also a raised costa as far as the middle, which, however, is continued nearly to the apex; in some female examples it is almost concolorous throughout its length.

The males have the basal joint of the antennæ very large, nearly as long as the three succeeding joints, and swollen, the succeeding joints gradually increase in length, the apical joint is equal to those preceding it and is not enlarged. The palpi and tips of the mandibles are fuscous. In the female all the joints of the antennæ are shorter and thinner.

Dalman described one species of *Tylocerus* from Jamaica, *T. crassicornis*; and Lacordaire (*Genera Col. iv. p. 348, note*) identified specimens from the Isle of Barthélemy with that species. The figure in the 'General Atlas' is wrongly referred in Gemm. and Harold Cat. to this insect. It is that of *T. atricornis*, an Eastern species. The Eastern species have often the terminal joint of the antennæ enormously developed, and form Hope's genus *Anisotelus*. Mr. C. O. Waterhouse has proposed a genus *Sphærarthrum* for *Telephorus præustus* Guér., an insect from New Guinea, which appears to correspond with the New World *Tyloceri* in not having the apical joint of the antennæ of unusual form.

#### SILIS.

*Silis*, Latreille, Règne An. éd. 2, p. 471; Gorb. Biol. C.-Am., Col. iii. pt. 2, p. 91.

*Ditemnus*, Leconte, Class. Col. N. Am. p. 189.

SILIS TENELLA, sp. n.

*Flava, capitis basi, antennis (articulo basali excepto), corpore (abdumine flavo-marginato) elytrisque fuscis, his lateribus et apice lecte flavo-marginatis. Long. 4-5 millim. ♂.*

*Mas, prothoracis margine laterali plicato, pone medium interrupto, angulis posticis acute prominulis, ante excisionem in tuberculum acutum elevato.*

*Hab.* ST. VINCENT: windward and leeward side (*H. H. Smith*).

The mouth, front of the head, the thorax, legs, and margins of the elytra are bright yellow. The antennæ are as long or a little longer than the elytra; their basal joint is yellow, the second and third are paler than the rest, as they are whitish beneath. The thorax is transverse, deeply sulcate, the sulcation not reaching the front

or the base. The legs are yellow, only the bilobed fourth joint and the claws and the claw-joint are infuscate. The elytra are coriaceous, the scutellum and the suture concolorous.

There is no species of *Silis* known to me with which this little insect can be readily compared; in size it is a little larger than *S. pauxilla* Gorb. (Biol. C.-Am., Col. iii. pt. 2, p. 304), but the sides of the thorax are quite different—the projecting tooth of the front part of the margin and the acute hind angle leaving a “nick” between them. The bright yellow legs and neatly margined elytra are different from anything I can recall in this now extensive genus.

Upwards of fifty species are described in the Biol. C.-Am. from Central America, several others are recorded from the United States, and there are numerous undescribed species in South America, besides many species from other parts of the world, which will fall into allied genera—as *Aclytia* from New Zealand; *Silidius* Gorb., Africa.

Eight examples were obtained.

#### C L E R I D Æ.

##### PELONIUM.

*Pelonium*, Spinola, Mon. i. p. 347; Gorb. Biol. C.-Am., Col. iii. pt. 2, p. 187<sup>1</sup>.

##### PELONIUM INSULARE, sp. n.

*Nigrum, elongatum, parallelum; antennis (clava excepta), prothorace (marginè antico nigro), pedibus, scutello, sutura et elytrorum marginibus pallide ferrugineis; capite creberrime, prothorace parcius punctatis; elytris punctato-striatis, interstitiis levibus. Long. 5-6 millim.*

Variat capite prothoraceque toto ferrugineis.

*Hab.* ST. VINCENT: leeward side, Mount Gay Estate (*H. H. Smith*).

In the section of *Pelonium* in which *P. quadrisignatum* Spin. and *P. crinitum* Klug come, this insect is most like *P. lincolatum* Gorb., from which it differs by the antennæ being yellow at the base, the legs wholly yellow, but is obviously variable in colour. When specimens have been collected from intervening localities, it is probable that several of the described species will be united as varieties; two specimens were obtained.

#### M E L Y R I D Æ.

##### ASTYLUS.

*Astylus*, Laporte de Castelnau, in Silberm. Rev. iv. p. 32; Gorb. Biol. C.-Am., Col. iii. pt. 2, p. 127.

<sup>1</sup> It is not deemed necessary to repeat the references and synonymy, which are fully given in the ‘Biologia.’



## ASTYLUS ANTILLARUM, sp. n. (Plate XXVII. fig. 7, ♂.)

*Astylo octopustulato* Gorb. *similis et affinis at major, niger, capite prothoraceque subtiliter, elytris crebre rugose punctatis; his maculis tribus, marginibus cum macula magna subquadrata subapicali conjunctis, saturate aurantiacis, costa subhumerali nigra, et marginibus reflexis subexplanatis. Long. 10 millim. ♂ ♀.*

Mas, *elytrorum apicibus truncatis.*

Femina, *elytrorum apicibus profunde excisis.*

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*).

Head subrostate, thickly and finely punctured, antennæ with the basal five joints rufous; thorax very even and smooth, a good deal narrowed in front, and with deflexed sides and front angles, finely, thickly, and confluent punctured. The elytra are more thickly punctured and less rugose at the base than towards the apex; the entire red margin and the apex in the female are somewhat expanded; each bears three irregular spots—one on the base pear-shaped with the pointed end towards the apex, nearly glabrous, but with a few scattered fine points, two others in a line and equidistant from the suture, not round as in *A. octopustulatus*, but rather oblique, and with faint indications of a costate interstice passing through them; the apical spot is much larger than in *A. octopustulatus*, squarish and united to the red margin. The submarginal costa is distinct, and terminates in the last black fascia. This beautiful insect is allied to, but amply distinct from, *A. octopustulatus* Gorb. l. c. p. 330, a species from Panama, where the genus apparently reaches its northern limit: it is larger, more deeply marked with orange-red, more coarsely punctured; the antennæ are longer, the spots are not nearly round as in that insect.

Only one pair were obtained.

## EBÆUS.

*Ebæus*, Erichson, Entomographien, p. 113; Gorb. Biol. C.-Am., Col. iii. pt. 2, p. 120.

## EBÆUS NIGROCÆRULEUS, sp. n.

*Ebæo seminulo* Er. *persimilis et statura æqualis, niger; elytris subcærulescentibus, subtilissime subcoriaceis, nitidis; antennis nigris, articulo basali subtus et secundo flavis; capite prothoraceque glabris, nitidis. Long.  $\frac{3}{4}$ — $1\frac{1}{4}$  millim.*

*Hab.* ST. VINCENT: windward and leeward side and south end (*H. H. Smith*).

This minute Melyrid is so closely allied to the insects recorded in the 'Biologia C.-Am.' as *E. seminulum* and *E. minimum* Erichs., from Guatemala, that it is sufficient to refer to the differences, which are in the broader elytra, and the blacker legs and antennæ, and in the bluer tint of the elytra.

About a dozen examples were obtained, all in St. Vincent, where it is apparently common.

## EBÆUS SEMINULUM?

*Anthocomus seminulum*, Erichs. Ent. p. 112.

*Ebæus seminulum*, Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 121.

*Hab.* GRENADA: St. George's, Mount Gay, and Vendôme Estates, leeward side. GRENADINES: Becquia and Mustique Islands.

This insect is longer than *E. nigrocæruleus*, and quite black above. The legs seem darker than in the species I refer to this name from Guatemala, but otherwise the West-Indian insect is very similar.

## EBÆUS MINIMUS?

*Anthocomus minimus*, Erichs. Ent. p. 113?

*Ebæus minimus*, Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 121?

*Hab.* GRENADA: Mount Gay and Vendôme Estates, leeward side; Balthazar, windward side (*H. H. Smith*).

The very minute size (about  $\cdot 75$  of a millimetre), black or blue-black colour, and the elytra widened behind (as in *E. nigrocæruleus*) distinguish this insect. It will be observed that the West-Indian insect has dark legs, whereas the Guatemala specimens had yellow legs. But there is not evidence enough to separate them.

## PTINIDÆ.

## PTINUS.

*Ptinus*, Linnæus, Syst. Nat. i. pt. 2, p. 565.

PTINUS TESELLATUS, sp. n. (Plate XXVII. fig. 8.)

♂. *Oblongus, brunneus, dense subrugose punctatus; antennis brevibus, articulis secundo ad decimum subæqualibus, obconicis vix elongatis, apicali parum elongato; prothorace hirtuli, postice transverse impresso parum constricto; elytris griseo hirtulis et pube flavo tessellatis, punctato-striatis. Long. 2.5 millim.*

*Hab.* GRENADINES: Mustique Island (*H. H. Smith*).

This *Ptinus* is not like any with which I am acquainted. The antennæ are short and with short joints more like those of *Niptus crenatus*: the thorax is constricted but not deeply, the widest part is in front of the constriction; the prosternal portion is very short, so that the head in repose must be reflexed; it is almost detached in the two specimens before me and could hardly be extended without being so. The eyes are prominent and rather coarse. The elytra have the sides parallel. The punctures are numerous in the striæ.

## GIBBIUM.

*Gibbium*, Scopoli, Int. ad Hist. Nat. p. 505 (1777).

## GIBBIUM SCOTIAS.

*Gibbium scotias*, Fabr. Spec. Ins. i. p. 74.

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*).

One example.

## MICRANOBIUM.

*Micranobium*, Gorham, Biol. C.-Am., Col. iii. pt. 2, p. 202.

## MICRANOBIUM EXIGUUM.

*Micranobium exiguum*, Gorh. Biol. l. c. p. 202.

*Hab.* ST. VINCENT: leeward side. GRENADA: Balthazar, windward side (*H. H. Smith*).

There are only two specimens of the minute Anobiad which I think may be identical with the one I have described under this name from Guatemala; but if they do indeed represent the same species, I think they are the other sex. The three terminal joints of the antennæ are dark and much longer than the basal portion, the second abdominal segment is not much longer than the third, and the thorax is not laterally compressed; the head is received more into the thorax. These two specimens are rather larger and more shining than those here referred to *M. pulicarium*. In dry examples it is only possible by detaching the head and limbs to study them, as they are closely contracted.

## MICRANOBIUM PULICARIUM.

*Micranobium pulicarium*, Gorh. Biol. l. c. p. 202, t. x. fig. 14.

*Hab.* GRENADA: Balthazar (windward side) and Grand Etang (leeward side); GRENADINES: Mustique Island (*H. H. Smith*).

This minute species is about 1 millimetre in length. It is distinguished from the *M. exiguum*? here recorded by its smaller size, by the whole insect being narrower and with a more compressed thorax, by the antennæ being much shorter, with the three terminal joints not much longer than the rest of the antennæ, and by the long second segment of the abdomen. The whole insect is brown, clothed with a grey, fine pubescence. I think the specimens may be females, but I do not think they are those of the preceding species, although one example is from the same locality, Balthazar. The antennæ are so short and delicate that the greatest care is necessary to extend them from dry specimens, clogged with gum.

## CATHORAMA.

*Catorama*, Guérin, Rev. Zool. 1850, p. 431.

*Cathorama* (Gemm. Cat. Col.), Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 207.

## CATHORAMA HERBARIUM.

*Cathorama herbarium*, Gorh. Biol. C.-Am. l. c. p. 207.

*Hab.* ST. VINCENT: leeward side. GRENADA: St. George's and Mount Gay Estate, leeward side (*H. H. Smith*).

A series of examples of what appear to me to be identical with this species were met with.

This insect seems common and widely distributed; it is clearly

distinct from *Tricorynus zæe* Waterh., described from Barbados, although resembling it apparently in size and colour, as the elytra, in addition to the two submarginal striæ, have distinct rows of punctures. *Tricorynus* Waterh. is probably not distinct generically from *Cathorama* Guérin, and has priority; but as this is not absolutely certain, it will be as well to retain the latter name, being expressive of the deflected position of the head. Very little is known of their habits, but one has been found in tobacco-waste.

#### LASIODERMA.

*Lasioderma*, Stephens, Ill. Brit. Ent. v. p. 417; Gorch. Biol. C.-Am., Col. iii. pt. 2, p. 198.

#### LASIODERMA PUBERULUM, sp. n.

*Breviter ovatum, castaneum, nitidum, fulvo-pubescent; antennæ perbreves. Long. 1 millim.*

*Hab.* ST. VINCENT: leeward side. GRENADA: Lake Antoine and Telescope Estates, windward side. GRENADINES: Bequia Island (*H. H. Smith*).

Oval, the head very much deflexed as in *Cathorama*; the antennæ not longer than the breadth of the head, basal joint stout and large, the following joints to the seventh small, serrate, not longer than wide, the seventh to the eleventh as small and not serrate; eyes very finely faceted. The elytra are usually slightly deepened in tone as they approach the apex; they are not visibly punctured, and are, as well as the head and thorax, clothed with yellow, dense, but very close pubescence.

This is the smallest *Lasioderma* I have seen; it is very like a small *Cathorama*, but readily distinguished, apart from the generic distinctions, and when contracted, by its lacking the two submarginal striæ and by its greater pubescence.

The antennæ in *Lasioderma* are 11-jointed; the last four joints are in no way enlarged or lengthened (in *L. puberulum* they are about as long as broad). There is no sculpture visible under the  $\frac{1}{4}$ -inch focus. A considerable number of examples occurred, chiefly at Telescope Estate. They are irregular in shape and broken.

The legs and underside are deep brown, pitchy in places.

#### LASIODERMA SERRICORNE.

*Ptinus serricornis*, Fabr. Ent. Syst. i. p. 241.

*Pseudochina serricornis*, Muls. Téréd. p. 175; Lec. Prodr. p. 238.

*Lasioderma testaceum*, Steph. Ill. Brit. Ent. v. p. 417.

*Lasioderma serricorne*, Gorch. Biol. C.-Am., Col. iii. pt. 2, p. 199.

*Hab.* GRENADA: St. George's, leeward side (*H. H. Smith*).

As I have remarked in the 'Biologia C.-Am.,' this insect is probably introduced through the agency of commerce. About fourteen examples were met with at St. George's by Mr. H. H. Smith.



## MIROSTERNUS.

*Mirosternus*, Sharp, Trans. Ent. Soc. Lond. 1881, p. 526; Gorh. Biol. C.-Am., Col. iii. pt. 2, Suppl. p. 349.

*Mirosternus* is a genus of Dorcatomini, very nearly allied to *Cathorama*, but distinct in having eleven joints to the antennæ. The basal joint is large and pear-shaped; a little curved, the second shorter, but much stouter than those of the funiculus, which are six in number; the third joint is a little longer than the five following, which are very short. Of the three club-joints, which are similar to those of *Cathorama*, the two apical joints are each shorter than the ninth, which is hatchet-shaped, acuminate within.

MIROSTERNUS LÆVIS, sp. n. (Plate XXVII. figs. 5, 5 a.)

*Oblongus, lateribus parallelis; nigro-piceus fere glaber, capite prothoraceque perminute, elytris minutissime punctatis, pedibus et antennis brunneis. Long. 3 millim.*

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*).

This insect is not unlike *Cathorama herbarium* at first sight, but it will on examination be found to be more parallel and narrower, and also smoother, without any trace of the submarginal striæ. The head and thorax, although more shining, are in *M. lævis* covered with small points, easily seen under a strong lens; the elytra are excessively minutely punctured, not in gemellate rows (as in *Cathorama*), indeed it is scarcely possible to say the points are arranged serially. The thorax is shorter than wide, its base is bisinuate, not margined in any way.

But one specimen has at present come under my notice; it is, however, in good condition.

All the *Mirosterni* yet described have been from one or two specimens of each. Dr. Sharp's species are from the Hawaiian Islands.

## PRIOTOMA.

*Priotoma*, Gorham, Biol. C.-Am., Col. iii. pt. 2, Suppl. p. 350.

*Priotoma* is very close to *Dorcatoma*; it is separated by a very different structure of the prosternum. The species have from eight to ten joints to the antennæ, but these are very difficult of observation.

## PRIOTOMA BREVIS?

*Priotoma brevis*, Gorh. Biol. C.-Am., Col. iii. pt. 2, Suppl. p. 351.

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*).

*Priotoma brevis* was described upon two examples from Bugaba in the Isthmus of Panama, and the present insect is identical or very closely allied to it. The elytra are punctured with very fine rows, and are sparsely pubescent or pilose. The metasternum is sparingly punctured, the punctures being distinct.

Seven examples.

## LYCTUS.

*Lyctus*, Fabr. Ent. Syst. i. p. 502 (1792); Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 211.

## LYCTUS PROSTOMOIDES.

*Lyctus prostomoides*, Gorh. Biol. C.-Am. l. c. p. 212.

*Hab.* ST. VINCENT: leeward side. GRENADA: St. John's River, leeward side (*H. H. Smith*).

A single example found at each of the localities does not seem to differ from examples of about the same size from San Lorenzo, Panama.

From the thorax being a little wider in front, and the sides accordingly contracting towards the base, I think these examples may be males.

## SPHINDUS.

*Sphindus*, Chevrolat, in Silb. Rev. Ent. i. (1833).

## SPHINDUS DUBIUS?

*Sphindus dubius*, Gyllenhal, Ins. Suec. i. p. 243; Jacq. Duv. Gen. Col. iii. t. 55. f. 275.

*Hab.* GRENADA: Balthazar (windward side) and Mount Gay Estate (leeward side) (*H. H. Smith*).

There is only one example from each of these localities, and I cannot see, on comparison of them with English examples of *S. dubius*, that they differ sufficiently to warrant their separation. Leconte was doubtful about the difference of his *S. americanus*, as he had not seen *S. dubius* (*cf.* Leconte, New Species of N. Am. Col. i. 1865, p. 104). Other American coleopterists seem to feel no doubt. Our West-Indian examples are rather small and rather short. *Sphindus* in England is usually found in a small black powdery fungus on the bark of beech trees.

## BOSTRYCHIDÆ.

## HETERARTHRON.

*Heterarthron*, Guérin, Icon. du Règn. Anim., Ins. p. 286; Lesne, Ann. Soc. Ent. Fr. 1896, pp. 111, 114.

*Polycaon*, Laporte de Castelnau, in Silberm. Rev. d'Ent. iv. p. 30; Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 210.

## HETERARTHRON FEMORALIS.

*Apate femoralis*, Fabr. Ent. Syst. i. 2, p. 361.

*Heterarthron femoralis*, Lesne, Ann. Soc. Ent. Fr. 1896, p. 118.

*Polycaon exesus*, Leconte, Proc. Ac. Phil. 1858, p. 74, ♀; Horn, Proc. Am. Phil. Soc. 1878, p. 553, ♀; Gorh. Biol. C.-Am. l. c. t. x. ff. 18 & 19.

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*). ♀.

M. P. Lesne has adopted unhesitatingly the synonymy, which I pointed out as probable in the 'Biologia Centr.-Am.,' of *Polycaon*

*exesus* Leconte, as the female, with *Apate femoralis* and *Apate gonagra* Fabr. The former is the male, the latter the female, described from the Antilles. See the note on this insect in 'Biologia C.-Am.' I have specimens from Barthélemy (St. Bartholomew) Island.

#### XYLOPERTHA.

*Xylopertha*, Guérin-Méneville, Ann. Soc. Ent. Fr. 1845, Bull. p. 17; Gorrh. Biol. C.-Am., Col. iii. pt. 2, p. 215.

#### XYLOPERTHA SEX-TUBERCULATA.

*Sinoxylon sex-tuberculatum*, Lec. Proc. Ac. Phil. 1858, p. 73; Horn, Proc. Am. Phil. Soc. 1878, p. 543.

*Xylopertha sex-tuberculatum*, Gorrh. Biol. C.-Am., Col. iii. pt. 2, p. 216.

*Hab.* GRENADA: Mount Gay Estate on the leeward side (*H. H. Smith*).

There are three specimens of a *Xylopertha* which I refer to this. Two of them appear to be males. These have the muricate front portion of the prothorax produced more over the head than in others I have examined, and with a brush of golden hairs on that part, and also have the basal joint of the antennæ with a long cilia on the inner side, and the front of the head hollow and depressed between the eyes.

#### TETRAPRIOCERA.

*Tetrapriocera*, Horn, Proc. Am. Phil. Soc. 1878, p. 544; Gorrh. Biol. C.-Am., Col. iii. pt. 2, p. 218.

#### TETRAPRIOCERA LONGICORNIS.

*Bostrichus longicornis*, Ol. Ent. iv. no. 77, p. 15, t. 3. f. 18.

*Tetrapriocera swartzi*, Horn, Proc. Am. Phil. Soc. 1878, p. 545.

*Tetrapriocera longicornis*, Gorrh. Biol. C.-Am. l. c. t. x. f. 20.

*Hab.* GRENADA: Mount Gay Estate on the leeward side, and Balthazar on the windward side (*H. H. Smith*).

This insect has been recorded from Haiti and Guadeloupe, and has an extensive range from Florida in the United States, over the whole of Central America to Brazil. It is the only species known to me with a four-jointed club to the antennæ.

#### RHIZOPERTHA.

*Rhizopertha*, Steph. Brit. Ent. iii. p. 354 (1830).

*Rhizopertha*, Lacord. Gen. Col. iv. p. 541; Redt. Faun. Aust. ed. 2, p. 570; Jacq. Duv. Gen. Col. d'Eur. iii. pt. 2, p. 231.

*Dinoderus*, Gorrh. Biol. C.-Am., Col. iii. pt. 2, p. 217 (pars).

#### RHIZOPERTHA BIFOVEATA. (Plate XXVII. fig. 9.)

*Rhizopertha bifoveolata*, Woll. Ann. & Mag. Nat. Hist. 1858, vol. ii. p. 409.

*Dinoderus bifoveatus*, Fleut. et Sallé, Ann. Soc. Ent. Fr. 1889, p. 419.

*Dinoderus minutus*, Fleut. et Sallé, l. c., nec Fabr. Ent. Syst. 1792, i. p. 363, nec Oliv. Ent. iv. no. 77, t. 2. f. 12 a-b.

*Dinoderus substriatus*, Gorh. Biol. C.-Am. l. c. p. 218.

Nec *Apate substriata*, Payk. Fn. Suec. ii. p. 142.

Nec *Dinoderus substriatus*, Jacq. Duv. l. c., nec auct. Europ.

*Hab.* ST. VINCENT: leeward side. GRENADA: Balthazar (windward side), Grand Étang Road and Mount Gay Estate (leeward side) (*H. H. Smith*).

Many examples.

The insect which I record here is not that generally known as *Dinoderus substriatus*, found in England and in various parts of Europe. Stephens, in describing his genus, assigns the insect he took for his type with doubt to Paykull's species. The Stephensian is, however, the same insect as that figured by Jacquelin Duval. Our West-Indian insect is a cosmopolitan species of *Rhizopertha*, easily known by its short thick-set form, by four or five concentric rows of muricate tubercles on the front of the thorax, but especially by the double fovea on its base. It does not agree either with the Fabrician description of *Apate minutus* nor with the figure given by Olivier, which latter, indeed, appears to me to represent the insect known to us as *Dinoderus substriatus* or an allied species, if, indeed, it ever really came from New Zealand at all. It will certainly save confusion in any case to adopt the Wollastouian name. *Rhizopertha* is distinguished from *Dinoderus* on account of the form of the last three joints of the antennæ. The tarsi are said by J. Duval to be "very short" in *Dinoderus*, "very long" in *Rhizopertha*: but the latter statement seems incorrect to me; I do not see much difference.

#### XYLOGRAPHUS.

*Xylographus*, Mellié, Rev. Zool. 1847, p. 109; Lacord. Gen. Col. iv. p. 549; Gorh. Biol. C.-Am., Col. iii. pt. 2, Suppl. p. 354.

#### XYLOGRAPHUS SUILLUS.

*Xylographus suillus*, Gorh. Biol. C.-Am., Col. iii. pt. 2, Suppl. p. 355, t. 13. ff. 21, 21 a.

*Hab.* ST. VINCENT: leeward side (*H. H. Smith*).

It is interesting to find this Guatemalan insect reoccurring in the West Indies. Specimens from St. Vincent are a little larger on the average than those from Central America, but are quite similar in other respects.

Seven examples.

#### CIS.

*Cis*, Latreille, Préc. Car. Gén. Ins. p. 90; Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 220.

#### CIS PUSILLUS, sp. n.

*Brunneus, thorace transverso, subopaco, lateribus tenuiter margi-*



*natis; elytris subtiliter punctato-striatis, striis ad latera profundioribus; antennis pedibusque testaceis. Long. vix 1 millim.*

Mas, *fronte*.

*Hab.* GRENADINES: Mustique Island (*H. H. Smith*).

A little smaller than *Ennearthron affine*, and less convex, and also to be distinguished by the striate elytra, and the wider and more expanded sides of the thorax. The latter is extremely finely and very closely punctured, the punctuation under the microscope appearing broken and the interstices being aciculate. The armature of the head in the male is similar to that of *E. affine*, *i. e.* there arise two short acute prominences from the clypeus. I was inclined to believe this little species was an *Ennearthron*, but there are ten joints to the antennæ. The pubescence is a little more rigid and more disposed in lines on the elytra than in *E. affine*.

Five specimens.

*CIS* NUBILUS, sp. n.

*Elongatus, depressus, fuscus, confertissime punctatus, pube brevi aureo-micante vestitus; elytris haud striatis; ore, antennis pedibusque testaceis. Long. 2 millim.*

*Hab.* ST. VINCENT: south end (*H. H. Smith*).

The head in this species is transversely impressed between the eyes, the antennæ are entirely pale. The thorax is oblong, produced in front, very thickly and finely punctured, and the surface is alutaceous between the punctures, it is therefore not shining. The sides are very finely margined. The elytra are long and rather depressed, clothed with a pruinose but golden pubescence, finely but distinctly punctured; the punctures show a faint tendency to form lines, but are not serial. The legs are rusty red.

There are five examples of this *Cis*, which may be compared to the European *C. fuscatus*, Mellié.

#### CERACIS.

*Ceracis*, Mellié, Ann. Soc. Ent. Fr. 1848, p. 375; Gorb. Biol. C.-Am., Col. iii. pt. 2, p. 223.

#### CERACIS FURCIFER.

*Ceracis furcifer*, Mellié, Mon. p. 379, t. 4. f. 24; Gorb. Biol. C.-Am. iii. pt. 2, Suppl. p. 359.

*Ceracis militaris*, Gorb. loc. cit. p. 223 (pars), t. 10. f. 26.

*Hab.* ST. VINCENT: leeward and windward sides (*H. H. Smith*).

#### CERACIS MILITARIS.

*Ceracis militaris*, Mellié, Ann. Soc. Ent. Fr. 1848, p. 379; Gorb. Biol. C.-Am. iii. pt. 2, p. 223 (pars), and Suppl. p. 359.

*Hab.* ST. VINCENT (leeward side) (*H. H. Smith*).

The head in the male has the clypeus raised into a lamellate horn, and has two raised laminæ on the thorax in front. The

St. Vincent examples, both male and female, have the head and thorax blood-red.

CERACIS TRICORNIS.

*Ceracis tricornis*, Gorh. Biol. C.-Am., Col. iii. pt. 2, p. 224, t. 10. f. 27, ♂.

*Hab.* ST. VINCENT: windward side (*H. H. Smith*).

Of four examples taken together by Mr. Smith one is fortunately a male, exhibiting the prothoracic acuminate projections just as in the type from Mexico. The front of the head is raised into a laminar horn as in *C. furcifer*, but it is not bifurcate as in that species, but only emarginate at the tip.

CERACIS UNICORNIS, sp. n.

*Nigro-piceus, nitidus, pedibus testaceis, thorace elytrorum latitudine, fere glabro, elytris levibus. Long. 1 millim.*

*Mas, capite cornu lamelliformi, thoracis longitudini æquali, apice integro, armato.*

*Femina, capite prothoraceque muticis.*

*Hab.* ST. VINCENT (*H. H. Smith*).

The distinguishing character of this little species is the long, simple, lamelliform, and rather narrow horn which arises from the front of the head in the male, similar to that in *C. furcifer*, but longer and not bifurcate or emarginate at its tip. The head is somewhat excavated between the eyes in the male, in the female it is quite smooth and convex. The thorax is as broad as the elytra at the base; convex and rather bulky, the sides have an extremely fine reflexed margin. The mouth, antennæ, palpi, and legs are testaceous.

Four specimens, two males and two females, were obtained.

CERACIS BIFURCUS, sp. n. (Plate XXVII. figs. 10, 10 a.)

*Piceus, nitidus, fere glaber, prothorace valido transverso, elytrorum latitudine. Long. 1 millim.*

*Mas, capite processu laminato, thoracis longitudine, utrinque ante oculos armato.*

*Hab.* ST. VINCENT, ♂ (*H. H. Smith*).

Under the microscope the thorax in this curious little insect is minutely punctulate, and the elytra are obsoletely and minutely puncto-striate. The laminæ which arise from the head are broad and stout, inclined to each other, but projecting nearly straight, curving only a very little inwards; they arise from the inner side of the eyes, and are as long as the thorax; the apex of each is simply rounded.

EUTOMUS.

*Eutomus*, Dej. Cat. ed. iii. p. 331; Lacord. Gen. vii. p. 369.

*Rhipidandrus*, Lec. Class. Col. of N. Am. 1866, p. 236; Fleut. et Sallé, Col. de la Guadel., Ann. Soc. Ent. Fr. 1889, p. 420.

This peculiar genus has been placed by Lacordaire in the Scolytides, where it stands in Gemm. and Har. Cat. next to

*Comptoscerus*, by Leconte and Horn with the *Heteromera*, but more recently by those authors, and by Messrs. Fleutiaux and Sallé, with the *Cioidæ*.

The antennæ are 11-jointed, the fifth to the tenth joints dentate-lamellate internally, the apical joint compressed, nearly round. The palpi with awl-shaped apical joints. The tarsi are four-jointed, with a long claw-joint; the first three joints nodiform, not pilose or spongiöse beneath. The pronotum robust, with distinct parapleuræ and sharp margins; its surface has the reticulate coriaceous sculpture of some *Cioidæ*. The elytra sulcate, with ridge-like acute interstices suggestive of an *Aphodius*.

The anterior coxæ are close together. The eyes are coarsely granulate and not cut out; the sculpture of the head is similar to that of the thorax, and is suggestive of *Hendecatomois*.

EUTOMUS MICROGRAPHUS. (Plate XXVII. fig. 4.)

*Eutomus micrographus*, Lacord. Gen. Col. vii. p. 370, nota; Fleut. et Sallé, l. c. p. 421.

*Hab.* ST. VINCENT: leeward side. GRENADA: Grand Étang (*H. H. Smith*). GUADELOUPE.

Lives in *Boleti* on trees according to the French authors.

EUTOMUS SULCATUS, sp. n.

*Eutomus micrographo similis et affinis, sed minor, rufo-brunneus; capite prothoraceque creberrime subtiliter alutaceis; antennarum articulis quinto ad decimum longe dentato-laminatis, subpectinatis, apicali interne acuto; elytris sulcatis, sulcis perobsolete subrugosis. Long. vix 2 millim.*

*Hab.* ST. VINCENT (*H. H. Smith*).

From *E. micrographus*, which this species very closely resembles in form, sculpture, and structure, *E. sulcatus* is distinguished by its much smaller size, its uniform brown colour, the longer lamellæ of the fifth to tenth joints of the antennæ, each lamella from the sixth joint being about as long as four joints of the funiculus, and their paler colour, by the acuminate apical angle of their terminal joint, and by the finer and less reticulate sculpture of the head and thorax.

About 20 examples of this species were obtained by Mr. Smith. It rather closely resembles a small *Aphodius* found by him in Grenada. The only other recorded species of *Eutomus* is a Madagascar insect, which very probably is not congeneric.

#### EXPLANATION OF PLATE XXVII. FIGS. 1-5 & 7-10.

- Fig. 1. *Tylocerus lineatus*, p. 320.
2. *Calopteron smithi*, p. 315.
3. *Photinus notatus*, p. 319.
4. *Eutomus micrographus*, Lacordaire, p. 333.
- 5, 5a. *Mirosternus lævis*, p. 327.
7. *Astylylus antillarum*, ♂, p. 323.
8. *Ptinus tessellatus*, p. 324.
9. *Rhizopertha bifoveata*, Wollaston, p. 329.
- 10, 10a. *Ceracis bifurcus*, p. 332.